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ABSTRACT

The disciplines, the means by which knowledge is generated and organized, provide a logical framework for the selection and organization of curriculum content. Curriculum development based on the disciplines facilitates content selection and cooperation with scientists and is compatible with the training of teachers and public expectancies. A reception psychology of learning parallels the structure of knowledge as a guide to measuring the facilitative effects of disciplined learning. The present trend toward non-cognitive approaches under the rubrics of relevance and problems is self-defeating because it neglects the establishment of orderly and systematic habits of thought. The schools' role is development of literacy and transmission of culture embedded in the rudiments of formal knowledge; thus schools provide foundations for professional training as well as transmission of culture for the masses. A social problems approach to social studies curricula does not transmit knowledge, confuses the role of political action with schooling, and provides a simplistic approach to the solution of complex problems. Curriculum is and ought to continue to be a translation of theoretical knowledge based upon the separate disciplines. (Author/JH)

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THE CASE FOR THE DISCIPLINES IN THE ORGANIZATION OF SOCIAL STUDIES CURRICULA FOR ELEMENTARY AND SECONDARY SCHOOLING

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Some ten years elapsed between Jerome Bruner's Process of Education and his ASCD address "The Process of Education Revisited." The former was a milestone in the popularization of the concept "Structure of knowledge;" the latter marked a headlong flight from cognition to affection, from discipline to improvisation, from educational improvement to a concern for social reconstruction.

Also contrast the theme of this NCSS conference, with its assumptions of a social revolution, to the 1961 NCSS conference in Chicago where the joint efforts of NCSS and the American Council of Learned Societies culminated in the presentation of a notable series of papers.

The historically minded will no doubt meet this session with the boredom of déja vu; it may recall the earlier controversies between Essentialists and Progressivists. Based on my reading of the trends, my judgment is that American education is now almost fully immersed in a retread of Progressivism, without sufficient knowledge to see, or courage to confess, the parallels. Although the code words will not be the same, it is my prediction that we are entering a phase in which we will embrace all the errors of the past without capitalizing upon the positive legacies of Progressivism. This will result largely from the fact that the denigration of history in the social studies has been even excelled in professional education where it has been banished from the undergraduate curriculum and persists only as a remnant in graduate schools. A grave consequence is that educators are always innovating, without building on the pedagogical accomplishments of the past. Colleges of education are frequently engaged in frenetic activity which is as productive as the proverbial squirrel on a tread mill. The frequent shifts in priorities in the United States Office of Education contribute to this running alternatively in different directions.

It is therefore appropriate, in my judgment, to have a session on curriculum alternatives, including an examination of the place of the disciplines. The disciplines represent the cultural element of stability

amidst curriculum change, and I am happy to speak in their behalf. A discussion of curriculum alternations is not, however, merely a question of the organization and methods of instruction. It inevitably becomes apparent that technical curriculum issues are secondary, and that the main issues have to do with more general notions as to the nature of society and man, the relation of educational to other social institutions, the nature of child development and the psychology of learning, and a vision of Utopia. This paper, therefore, will be divided into three parts. The first will briefly deal with the relationship of disciplines to the generation of knowledge and their place in culture; the second will indicate the direction implications for school curricula; and the third will attempt to place the general issue of curriculum development in the broader perspective of different conceptions of schooling.

Part I: Background to the Disciplines

1. The cultural reality of the disciplines. I would like to begin by calling your attention to the obvious--there are organized bodies of knowledge which exist as a part of culture. There may be disagreement as to whether history, geography, axiology, or religion constitute categories which should be subsumed under the broader classification of social science, but there is agreement that such disciplines exist. The evidence of their existence is not nominalistic but real. One can point to specific books which record the major findings of the discipline; to other books and articles which report the advancing frontiers of knowledge; to specific practitioners of a discipline, who are identified by and respond to such designations as anthropologist, economist, political scientist, and the like; to discussions of the nature of disciplines which may disagree on certain points but agree on the substance of the discipline; and to the institutionalization of the disciplines in the organization of universities.

The evidence of the cultural reality of the disciplines is overwhelming. As an artifact, evidence is found in the realia of the disciplines, usually printed language; as behavior, evidence is found in the teaching and research efforts of the specialists. A value system is also implicit in the disciplines in the form of interpretations and judgments made concerning the phenomena described. In the social sciences, this aspect of the cultural reality of disciplines is frequently neglected.

I am, you may reply, merely asserting the obvious. It is nevertheless useful to begin a discussion of a phenomenon by gaining concurrence on the existence of the phenomenon observed. Various disciplines exist as organized aspects of the culture. It is important to bear this point in mind. Smith, Stanley, and Shores, in their so-called cultural approach to Fundamentals of Curriculum Development, never came to grips with the fact that the disciplines are a significant part of the culture. In their text, and in most other curriculum texts, a straw house is erected to stand for a discipline or subject approach to curriculum. They then proceed to blow

over the straw house with glee, completely oblivious to the fundamental rule of cultural transmission: that which originates in a culture tends to persist until replaced by a more attractive and functional alternative.

2. The function of the disciplines. This cavalier dismissal of the reality of the disciplines results, in part, from the failure to recognize the dynamic and knowledge generating function of the disciplines. The typical approach of the professional curriculum specialist--who, incidentally, writes extensively about curriculum in the abstract but rarely produces any actual material for pupil consumption--is to regard the disciplines simply as a static body of knowledge, something which has been carved up and categorized, and finished.

Here let us recognize the function of the division of labor. The disciplines exist, and will continue to exist, simply because they are useful organizations of previous knowledge for the generation of new knowledge.

Division of labor is a fundamental aspect of all culture. The two universal cultural bases for the division of labor are biological--sex and age. The more differentiated the technology, the greater the division of labor on the basis of job specialization. Archeological records would indicate that even by the end of the Neolithic Age job specialization had advanced to the point that the members of a culture no longer shared all of the culture, but only a part of the culture, which still conformed to a pattern. The level of living had vastly improved by the substitution of specialization for generalization. Specialization permitted an increase in applied skills.

A similar development took place in the elaboration of theoretical knowledge. The education of archaic Greece was not bookish or verbal. In the delightful portrait of Freeman, the education of Hellas perhaps conformed more to the ideal of American Progressives than at any other time. Physical exercise in the gymnasium, playing on the lyre, and the learning of morals and traditions through the recital of literature constituted the basic curriculum. But the Greek mind was curious about man and the world in which he lived. Some men dedicated themselves to the pursuit of wisdom. A philosopher was not merely an abstruse metaphysician, but a mathematician, scientist, and keen observer of the human scene. By the time of the Hellenistic period, Greek science had made such tremendous strides that education took a decidedly different turn from the idyll of Arcadia. Education or science tended to become specialized because it was the nature of knowledge to differentiate itself into categories appropriate to the subject of its investigation. It tended to become bookish because the sheer volume of knowledge required preservation outside of the oral tradition. Reading also facilitated transmission.

The disciplines, therefore, exist as a division of labor. They serve two important functions. The first is that of systematization, preservation, and transmission. Knowledge is not an inchoate number of facts, but a

distinct and organized entity. The second function the disciplines serve is that of creation. Knowledge grows from knowledge. A particular knowledge system not only restricts the types of questions which may be asked, but it also facilitates the asking of questions. The concept of discipline is not static but dynamic. In the nominative sense, the emphasis is on a body of knowledge; in the active sense, it is on the principles and methods by which a body of knowledge is extended. The concept of discipline thus embodies two curriculum constructs which are all too often treated antithetically rather than as complementary--curriculum as subject to be learned and curriculum as a process to be mastered. More will be said about this aspect of discipline under curriculum implications.

3. The nature of the disciplines. The disciplines, from a cultural standpoint, are the specialized aspects of language which permit communication about, and vicarious manipulation of, distinct phenomena. While thought may not be synonymous with words, it is rare that we find thought, either manifested by artifact or behavior, where there are no words to organize perception and discrimination. A discipline may be therefore defined as a language system which consists of a series of distinctive concepts which permit the identification, description, classification, and explanation of phenomena. The elaboration of such a system does not preclude the making of error. The history of thought in both the natural and social sciences are replete with false assumptions which once masqueraded as truth, such as the Ptolemaic conception of the universe or the recapitulatory-stage theory of culture development. Scholars, as well as politicians, err. But even false postulates and assumptions have their utility, for they stimulate inquiry, and thus the development of new insights and more accurate knowledge.

Although languages are arbitrary symbol systems in the sense that there is nothing inherently logical in the correspondence of word and concept, once certain words have been selected to represent concepts, they coalesce in logically consistent patterns. These concept clusters constitute the building blocks of a discipline. The elaboration of a concept involves a series of related concepts, so that the capacity to think within the framework of a discipline, depends, in part, on mastery of the symbol system and their logical interrelationships expressed through concept clusters. Perhaps the best effort to emphasize this aspect of the disciplines in curriculum building is given in the text by Michaelis, Grossman, and Scott, New Designs for the Elementary Curriculum.

But a discipline consists of more than concepts, of words in isolation. Just as the unit of meaning in ordinary language is the sentence, the unit of meaning in a discipline is a statement, for it takes a statement to express relationships among concepts. Here Henderson's analysis of cognitive knowledge as consisting of analytical and contingent statements, prescriptions, and value statements is helpful in understanding the dynamic nature of a discipline, even when looked at primarily as a logically organized conceptual body of knowledge from the standpoint of cultural preservation and transmission. The social sciences in particular are heavily

laden with value statements, because the interpretation of phenomena involves judgments which imply rating or grading.

It is easy to illustrate the function of analytic statements in the social sciences,because they are necessarily true, if only by definitional stipulation, as in the statement: "A federal system has the powers of government distributed between one central government exercising national jurisdiction and other governments, frequently called state or provincial, which exercise powers only within their respective territories." Analytic statements are extremely important to the disciplines because they utilize a high proportion of abstract concepts and permit the elaboration of explanatory theories which subsume discrete phenomena.

Contingent statements are not necessarily true, but can be verified only by observing the actual correspondence between the statement and the actual occurrence of phenomena. Most of the knowledge of the social sciences is remote from experience in time and place; hence verification is usually vicarious and by appeal to authority. How does one test the truth or falsity of this statement for example? "Federalism in the United States was a creation of the states and was thus constructed from the bottom up; in Mexico, national and state governments were a creation of the constitution, and federalism was constructed from the top down." The social sciences are replete with such statements.

While value statements are generally associated with such terms as good, best, beautiful, many statements are interpretation and judgmental and are probably more closely related to a value statement than to a contingent statement. Take the previous statement "Federalism in the United States was a creation of the states and was thus constructed from the bottom up; . . ." Alexander Stephens erected his elaborate treatise A Constitutional View of the War Between the States on this idea. But Lincoln espoused another view--that the Union was a reality which antedated formal constitution making by the states. Since this view prevailed by force of arms, it must be necessarily accepted as de facto correct. Behavioral scientists, geographers, as well as historians, make statements which function as either contingent or value statements, according to the context. And the context of the social sciences, with the variables of time and place, loom of far greater significance than in the physical and biological sciences.

This emphasis on the types of statements in the structuring of the disciplines has been somewhat of a detour, but the detour was deliberate. Because the structure-process discipline advocates emphasized asking questions, little attention has been given to the function of statements in the disciplines. Neither one precludes the other, but the concept of organization implies a systematic relational system which is the function of statements and not of questions. It is my hunch that the quality of questions is directly related to the quality of knowledge, and that quality of knowledge is expressed primarily as a quantitative language variable. The person who knows more has the capacity of making a greater degree of associations and relationships, and therefore can ask questions which are beyond

the aptitude of the less knowledgeable. In brief, to generate new knowledge one must have access to old knowledge.

The objection may be made that this approach to the disciplines places a premium on convergent rather than divergent thinking. It does. But it is also consistent with the cultural model of innovation by adaptation and modification of old traits, rather than by the invention of new traits. And in cases where divergent thinking may lead to a new solution, such as in medicine or engineering, the product is frequently tested over and over again, with models or animal surrogates. So by the time the new invention is tested where it counts, in terms of human life or cost, the divergent project has become convergent insofar as its compatibility with the ongoing culture has been confirmed. In art and music divergence is acclaimed and can be tolerated, primarily because art and music are primarily ornaments without overtones of race survival. I sometimes think that the approach in the social sciences frequently borders more on the arts and the humanities rather than science, because the knowledge or absence of knowledge seems to make little difference. "Knowing that" or "knowing about" in the social sciences seems to be rarely translated into the technology of "knowing how." The social sciences do have certain applied fields, such as social work, criminology, and education, but the technology in such fields appears to be primarily prescriptive and exhortatory, based upon the description of collective experience as much as on systematic knowledge.

4. The logical organization of the disciplines. Disciplined knowledge is orderly knowledge. Although some authors write with greater felicity than others, there is a common attempt to present the body of knowledge in terms of its organizing structure. Hence, the emphasis on structure is simply a way of emphasizing order and logic, whether one conceives of structure as a body of knowledge, a process, or as both. Normally, scientific treatises are written as expositions. An exposition, as the root indicates, is simply an attempt to expose or make clear the nature of things. It abstracts, categorizes, and simplifies in order to make certain relationships specific and to delineate particular characteristics of phenomena. From the standpoint of transmission, the disciplines are logical, expository presentations of statements using facts and assumptions to facilitate knowledge acquisition.

5. Professional transmission of the disciplines. The disciplines are a part of culture, and their transmission, specialized though it may be, may be regarded as a part of enculturation. Among the great modes of enculturation are doing and telling. Telling is not confined to the disciplines, but is part of all enculturation, beginning with the gurgling noises a mother makes with her babe. Telling is extensively used to control and direct motor behavior and manners, as well as to develop all types of manipulative skills, and is by no means restricted to the transmission of the disciplines.

Play and apprenticeship are the two great modes of learning by doing. Play is a type of learning in which the child, in a variety of roles, imitates adult behavior. Froebel was among the first to emphasize the

importance of play in the education of the child. But while a child may play like a farmer or a brick mason, and thus vicariously acquire attitudes as well as skills, there are no models to imitate as historian, sociologist, and the like. These specialized behaviors are highly verbal, and remote from the imitative experience of the child.

Apprenticeship is probably as old as culture, and still remains important in learning a trade or skill. The dissertation is frequently the scholarly reporting of an intensive apprenticeship, in which the prospective candidate does something as well as talk about something. He may collect data to write a biography, devise an instrument to use with a particular sample, conduct a microregional study in geography, or do field work in archeology or ethnography. In the social science disciplines, learning by doing still constitutes only a small part of the total training, measured by hours in course work and hours in the dissertation. In social science classes, the two main methods of transmission are reading and listening. It is my surmise that these methods persist, not because college professors are obtuse or reactionary, but because these methodologies are more efficient. The oral class lecture, in its more formal sense, is simply an alternate delivery system to the lecture given in a book. Class attendance probably has its greatest utility in repetition and breaking an area of a discipline into small segments which may be apprehended by the learner. The proportion of time devoted to the methodologies of the profession, such as historiography and historical method in history, and statistical analysis, case methods, and observation in sociology, constitute only a small percentage of effort, as measured by hours spent in acquiring knowledge as transmitted by that discipline. Depending on the congruence of one discipline with another, e.g., the history of Mexico with the anthropology of Mexico and the geography of Mexico, professionals often seek training across fields. This is most conspicuous in area training programs. Even though students and teachers may see the need for multi-disciplinary training, the job market emphasizes specialization in accordance with the old principle of division of labor. But this does not preclude any professional in one social science discipline from reading widely and borrowing heavily from another, as appropriate. Cultural studies, whether done by anthropologists, geographers, or historians, have enriched our understanding of the concept of culture. The fact still remains that, given the state of knowledge and the needs for professional training, specialization rather than diversification will continue to dominate. And on this basis we come back to the fact that a discipline is also a means by which a scholar generates new knowledge. No longer does he aspire to know everything--he aspires to know enough about a particular discipline to master it and make some contribution. In theory we espouse the generalist; in practice, our job market has little place for them, whether in the social sciences, medicine, or some other field. The social studies educator often gives a Luddite reaction to this specialization of the disciplines, often trying to create a new synthesis to overcome what he conceives to be the shortcomings of the separate disciplines. This reaction is espcially prevalent at the elementary level, where there are always attempts to glue back the fallen Humpty Dumpty of social studies.

Attempts to create a comprehensive social science are not new, and antedated the efforts by social studies educators. Notable nineteenth century efforts in this direction were made by Comte in France with his Positive Philosophy, Spencer in England with his Social Statics, and H. C. Carey in the United States with his Principles of Social Science. The American Social Science Association was established in 1865, 19 years before the organization of the American Historical Association in 1884 and almost 50 years before sociology, geography, and political science organized professionally. The dominance and persistence of separate disciplines simply reflect the fact that they represent a productive basis for the generation of knowledge. Phenix made this point succinctly when he said "Disciplines arise because knowledge has certain inherent natural growth structures." It therefore seems logical to introduce young learners to the acquisition of knowledge through the medium of the separate disciplines. Part II will attempt to interpret this delineation of the disciplines for curriculum development.

Part II: The Disciplines in School Curriculum Development

1. The disciplines form useful categories for transmitting knowledge for young learners. Because the disciplines exist as part of our cultural heritage, the organization of curricula by disciplines facilitate the transmission of knowledge. Since the disciplines also have their methods of inquiry, a discipline organization is compatible with emphases which go under such labels as developing critical thinking, creative thinking, and the like.

A discipline approach permits the curriculum developer to concentrate on the important matters of content emphasis and the most effective methods of presentation for different types of students. The energy of most curriculum specialists is completely wasteful, spent in arguing about the mechanics of curriculum organization rather than working to organize the content in the most efficient manner. The reduction of the number of concepts and their presentation in simple, but accurate, language is not an easy task. The adult who has not written for the child thinks of children writing as a low level performance. The product may often appear over-simplified and naive, but writing and rewriting is often necessary to produce a few new pages. This is not necessarily the case with content which has long been included in school offerings. Here the tendency is simply to copy, change, or "pretty up" what has been previously done. But where a new concept is being introduced, a new inventive effort is required.

The discipline does not require that a concept be adapted to school instruction, but it suggests the way. In making our selections from anthropology and geography, we have followed the simple rule--to emphasize those theoretical concepts which have greatest explanatory power. Even where the parent discipline serves as a guide for reduction, there is often a tendency to forget that the beginning of good explanation is in simplification. A good example of how a curriculum developer can err is in our

chapter "Culture Change" in the unit Concept of Culture. A comparison of that chapter with the unit Cultural Change: Case Studies of Modernization in Three Countries, shows that the rate of presentation is all important. A condensed version, lacking illustrative detail, does not provide sufficient reinforcement for the development of concepts. By looking at the discipline, however, there was no difficulty in ascertaining what were the significant elements in cultural change and finding appropriate examples of modernization.

There has been little curriculum research because energy and time are devoted to trying to elaborate novel curriculum designs. I suggest that the time might be spent in a more productive manner by adhering to a discipline design and devoting energies to the exploration of task variables related to teaching and learning. Curriculum ideas, including those about the disciplines, are 99 percent opinion. If curriculum specialists have any scientific pretensions, it would seem desirable to collect evidence to support their many claims. I do not claim that organizing school curricula on the basis of the discipline is the best way. It is a logical way, however, based on the practical principles of reduction from the complex to the simple.

2. The discipline approach facilitates cooperation with scholars. One way of assuring the cooperation of specialists in the disciplines is to have the school discipline parallel the major concepts and the structure of the parent social sciences. In this way, the cooperation of the scholar may be more readily enlisted. He can participate in the planning of curriculum from the perspective of the discipline, and he can review curricula in terms of the perspectives of that discipline. In this way, the problem of a curriculum becoming outdated because of changes in the disciplines is minimized, and the foundation is laid for cooperation in such other activities as teacher training. The long and sustained interest of American historians in the teaching of history is an example of the fruitful collaboration which comes from a discipline centered curriculum. In contrast, political scientists have never had a close identity with school instruction, and have only within the past year supported a curriculum project. Therefore, what happened to the American government course? It was translated into the famous Problems of Democracy, which had no systematic substance. The scholars in a discipline cannot be expected to become educators; they have a different interest and a different focus. But a way to maintain a bridge of cooperation between the professors in arts and science and the professors in education is to follow a discipline organization. The discipline then dominates the approach to subject matter selection and sequencing, although the element of personal choice will never be eliminated.

3. The discipline approach is consistent with teacher training. Normal schools and teacher colleges have been converted into general colleges. On university and college campus alike, the training of teachers is no longer the function of an institute with a unified purpose, but is artificially split between a college or department of education on one hand, and the college of arts and sciences on the other. The division of labor is highly unequal. At most, at the secondary level, a college of education has about seven courses--one introductory, one in educational psychology,

one in curriculum, one in methods, and then a quarter or half semester of student teaching. If, using quarter hours, 180 quarter hours constitute the hours for a college degree, our education training constitutes about 16 percent. Who trains the teachers? The professors in education? We pretend to that claim, while the evidence is to the contrary. The college of arts and sciences trains the teachers of social studies, as they do the teachers of science, history, and mathematics. Research on teaching efficacy generally is based on descriptions of the congruence of teacher behavior with perceptions of traits described by teacher educators. We do not yet have good studies of teacher effectiveness, using pupil performance as a criterion. My hunch is that the type of teacher training we give in departments of social science education actually may be a disservice. Prior to student teaching, we enlarge upon the sins by which they have been taught, using methods that we condemn, and then exhort them to go out and behave differently.

It would seem that we would strive to capitalize upon the best in the methods by which they have been taught, and help them to use these in their own teaching. They will lecture, because this is what they have heard course in and course out. But do we ever attempt to improve their skill in lecturing? They will use a text, because texts are made available and they have been accustomed to using texts. But do we spend any time working with students to improve their use of texts in their teaching? The discipline approach provides a frame of reference for working with teachers which is consistent with their past and future training. We refuse to use it, but, instead, constantly try to impose on them schema of organization and methodologies in which they have not been trained, but only exhorted. The result is the sin model of professional education. All teachers, from the day they graduate, are seen as needing in-service education. They must take more content courses, which simply exaggerates their previous training, and take more education courses, which repeat as graduate courses the same deficient training of undergraduate days.

Part of this inefficiency I attribute to the difference between teaching performance as perceived in schools of education and as perceived in arts and sciences. The prospective teacher is caught between these two conceptions.

I have already indicated what I consider the proper remedy--the revival of the teacher college in which the educator is both academician and educator. If that is not achieved--and it is unlikely--there will continue to be cognitive dissonance between training in the social science departments and the college of education. I therefore suggest, on the basis of logic and not on the basis of evidence, that it might be more productive in the long run to model teacher training on the de facto situation.

4. The psychology of learning. The conception of a discipline as an organized body of knowledge has its learning complement in the reception learning theory of Ausubel. Here is a marriage of learning theory and curriculum. According to Ausubel, learning is facilitated when material

is structured in such a manner to be integrated into the existing cognitive structure. I relate this to teaching and classroom transactions, and not to curriculum material, although Ausubel does not make this clear. The teacher, in interaction with the child, can ascertain what a child knows or does not know, and make judgments as to the integration of new learning with old.

The curriculum developer, on the other hand, is primarily concerned with the presentation to the learner of new subject matter. While we have not found the principle of the learner's antecedent cognitive structure to be a useful construct, the ideas of generality, subsumption, progressive differentiation, and integration are useful in the development of material. In reception learning, the learner has to internalize the facts, concepts, and principles which are presented. The task of the curriculum developer to facilitate learning is thus to present facts, concepts, and principles to the student with the greatest degree of clarity, using the principles of generality and subsumption as a basis for the student to erect an ideational scaffolding to integrate lesser principles and relevant factual data.

The reception learning psychology of Ausubel, admittedly unattractive and redundant, is one of the few attempts to provide a description of learning which parallels the learning of subjects in school. Except for the concept of advance organizers, the results of which are equivocal, there has been no attempt to apply the concept of reception learning to a broad scale curriculum effort, which would involve systematic and concurrent examination of the task variables in learning.

Learning theories which depend on learning from books, and which involve a great deal of memory, have long been unpopular. Far more attractive have been those conceptualizations of learning which have involved learning by experience, activity or some type of motor involvement. In contrast, learning from books and lecture has been described as passive learning, soaking up like a sponge, little pitchers being poured in from big pitchers, and the like. Educational psychology is just beginning to recover from this overkill, which denied language a place in school learning.

One reason, I surmise, that learning theories tied to language are not popular lies in the nature of language. A person does not discover his language; he acquires it. His growth in the culture is proportionate to his ability to receive and use new language. Cultural growth in language requires a high degree of word specificity, for words are simply the labels with which to manipulate concepts. Hence no word, no concept. It is for this reason that vocabulary tests correlate so highly with reading ability and knowledge of subject matter. Perhaps the least successful unit in our anthropology series is the unit on Language. One reason that we prepared this unit was the hope that social studies teachers might gain new insights into language as a part of culture and give increased importance to systematic language usage in the social studies. Dewey made some statements critical of verbal learning which, taken out of context, were used by Progressivists to deemphasize the importance of language and emphasize activity. No

experience has any communicable meaning unless it can be explained in language. No activity has any transferability unless the steps and procedures can be described in language. If we wish to extend the child's thinking capacity, he must learn new words to express new ideas and must practice expressing them in sentences. If this is not done, the child responds in class in monosyllables, as do so many of our college students. The teacher fills in the balance of the sentence and makes the assumption that the child knows or understands. While answering in complete sentences may become mechanical, it behooves the classroom teacher to develop a high degree of articulateness in the students. In the social studies, it is the use of words which give us evidence of how well we teach and how well students learn. Opportunities to collect other types of reliable evidence are few indeed.

A reception learning model is consistent with the conception of the disciplines as systems of verbal behavior. Reception learning therefore provides one of the few approaches to school learning which permits the researcher to investigate the task variables of school learning in a meaningful manner.

In this respect, it should be noted that there is still a tendency to make a distinction between the psychological order of learning, and the logical order of exposition. To this non-substantiated distinction, both in logic and in fact, we owe much of our curriculum confusion in arranging material for young learners. Logical sequences are more easily learned than illogical arrangements; organized and synthesized principles can be assimilated more easily than disconnected facts. The logical order is hence the psychological order for learning, and the distinction serves no useful purpose. Abandonment of misconceptions about the psychological order of learning make it easier to apply a reception model to the organization of the curriculum for instruction.

In the previous sections I have indicated some characteristics of the disciplines and the implications for curriculum construction. In this last section I shall make some general remarks about the utility of the distinction between education and schooling.

Part III: Education and Schooling on the Current Scene

The discipline approach to curriculum development was revived in the early 1960's. At the same time there was a tremendous emphasis on compensatory education. Not only would the decade see an increase in the cognitive powers of children, but education would also compensate for the many social ills which children had suffered at the hands of society. So the naive faith ran.

By the end of the decade the schools were under attack from without and from within. The elaborate cognitive-inquiry strategies had frequently met with failure in motivating students, and, in the inevitable pendulum swing, the affective domain rose in ascendancy. Critics vied in condemning the

errors of the schools, and there was an increasing tendency to move from conceptions of school improvement through curriculum and teaching to social reconstruction. When educators fail to teach even the most rudimentary skills, such as reading and simple arithmetic, they never hesitate to advocate a reconstruction of society to solve their problems. Disillusionmentment is inevitable when one confuses education with schooling, and expects the schools to meet all social ills.

Education, in its general significance, means rearing. Education is the province of parents and society. Schooling is but one aspect of rearing, and is the institutionalized means for the transmission of a literature culture. Cultures which do not have reading and writing get along nicely without schools, but whenever writing and the correlate art of reading emerged, schools for the teaching of reading and writing also emerged. The specialized nature of symbolic mastery, represented by the code of an alphabet or a counting system, required specific training. The schools exist because the specialized needs of a literate culture require their existence for the transmission of the culture.

As a specialized institution, schools conform to the pattern of the general culture. This results from the fact that although the primary purpose of the school is literacy, this major objective brings together large numbers of pupils and teachers as parent surrogates. The school thus constitutes a microsociety characterized by a few adults and many young learners. In this society there are many learnings which take place in addition to those associated with literacy. Manners, attitudes, and dispositions of the general culture, which children bring from their homes, interact with the social as well as intellectual expectancies of teachers. The school is not an artificial environment, as many contend, but is designed for the specialized functions of literacy and knowledge transmission. Students early learn about the expectancies of school before they enter, and, for 12 years or more, it becomes one of the most significant aspects of their experience.

Schooling is primarily concerned with the symbolic skills and the acquisition of verbal knowledge organized in the disciplines. Notwithstanding the emphasis of developmental psychology, the knowledge that comes with schooling is a product not of growth but of deliberate instruction. It is possible to attach to the schools supplementary functions, such as transportation and feeding. Depending upon the resources of a community, it may have a rich or poor offering of extra-curricular activities. To the extent that they are embraced within the scope of school responsibility, however, they are not extra-curricular but simply an extension of the curriculum. Although school people sometimes argue about the nature of the essential curriculum, the layman has no such difficulty. It is the skill and knowledge subjects--reading, mathematics, composition and language usage, the natural sciences, and the social sciences. In making this distinction he reacts with good common sense. Apprenticeships and on-the-job training, in varying degrees, can take care of the training to earn a livelihood. But only a high degree of success in the traditional school subjects open the doors to a higher education, and the professional and management positions which are typically associated with a high degree of schooling.

Elementary and high schools in a literate culture form two major functions. The first function is the one of general literacy. Since compulsory primary education was first introduced into Prussia in the late eighteenth century, it has become increasingly recognized that education not only contributes to an individual's capacity to develop his own powers, but it is also a means by which society capitalizes its manpower resources. A country with a population literate in mathematics and its own language has a much richer population resource than a country with the vast majority of its people steeped in ignorance. The commanding lead which the North Atlantic Community has in standard of living and technology may be partly attributed to their reinvestment of economic resources into schooling, not merely for the few but for the many. Against this background, claims to improve the schools and abolish schooling are merely irresponsible demagoguery.

Elementary and intermediate schooling also serve another function--they are screening devices for access to higher education. Before the advent of public education, only the rich had access to the universities, except those selected by the Church for higher education. And even in many countries, a discriminatory dual system was established, one for the lower classes terminating at an elementary level, the other for the upper classes controlling access to higher education and the prerogatives which class, power, and education control. While the United States has not been completely successful in establishing an absolute equality of opportunity--an equalization which must extend beyond the school and enter into every fabric of society--it has been successful in making schools available to all its children, in a continuous sequence from first grade to college.

It must not be expected, however, that schooling will equalize achievement, even if the technology of mastery learning were actually perfected. The interaction of differences in aptitude with schooling does not lessen differences in aptitude as measured by achievement in schooling, but rather emphasizes the difference between the able and the less able. Democracy in education consists of providing children with an opportunity to be schooled; it does not consist in guaranteeing that they all have equivalent success as measured by achievement.

But it is my observation that schooling has become inundated by a variety of professionals whose major concern with the institution of schooling is not teaching, but some other function. They range everywhere from guidance personnel to child development specialists. Since most compensatory efforts have been in the area of early childhood education, it is important to remember that the assumptions relating to the capacity of schooling to increase the achievement of children were rarely tried. From the inception, the child developers remained in control, and the cognitive psychology of Jean Piaget, embraced with great enthusiasm, was so applauded because it was not a teaching psychology but a developmental psychology. Many of the structured approaches to the fundamental skills have shown a high degree of pay off, as measured by pupil achievement in terms of effort. These approaches have not proved nearly as popular as the revitalization of old programs through federal investment. I believe that compensatory education has

failed because it was never tried. The philosophy of most Headstart workers precluded any direct teaching; in contrast, there was an emphasis on incidental learning through play. And now the very educators who devised and advocated methods which may be totally unsuited for language handicapped learners are now condemning education and the discipline approach to learning. In our preoccupation with discipline-as-process we may have completely overlooked what I emphasized was an equally important part of a discipline--orderly and systematic knowledge which is prerequisite to utilize methods of inquiry.

One of the things we sorely lack in education is a sense of a time dimension. Project Social Studies under U. S. Education auspices was initiated in 1963. Before the decade was over, the experimental projects had funding terminated. None of the projects used a true research and development model. It was not until the conclusion of our own Anthropology Curriculum Project did I become completely aware of how in the emphasis on production we had miffed a chance for curriculum research trying to tie assumptions of the nature of the learner and of schooling to the systematic develoment of curriculum material. While reviews in Social Education may serve to keep some interest in the Projects alive, it appears to me the interest of the educational community has already shifted.

Since the beginning of systematic education, there has always been a tension between formal and informal approaches to education. Since Rousseau, the most notable educational exponents have inclined toward informalism--Pestalozzi in Switzerland, Froebel in Germany, and Parker and Dewey in the United States, to mention a few. Dichotomies are always deceptively simple, but it is convenient to oppose some of these different points of emphasis:

Life v. Knowledge
Action v. Study
Doing v. Ideas
Doing v. Knowing
Doing v. Thinking
Growth v. Learning
Development v. Teaching
Romanticism v. Scholasticism
Liberty v. Regulation
License v. Law
Process v. Product
Affection v. Cognition

These dichotomies are not absolute but seem to have become inherent in American education since the early part of the century. Progressivism did not become discredited as much as it simply ran out of steam as the most reasonable of its ideas and procedures were adapted to the mainstream of American education. The cognitive emphasis of the early 1960's was not the reasoned and rational embrace of a cognitive, disciplined point of view, but the reaction to the technological challenge raised by the Soviets. It had a profound impact on the content of the high school curriculum, but

scarcely affected the elementary curriculum and early childhood education. Here the new language of concepts and the structure of knowledge was talked, but it was not implemented.

Once again the pendulum is shifting toward career, life adjustment, problems, values, and other orientations of the early post-war period. These are parochial abberrations, and will be just as self-defeating as the earlier curricula of the activity movement which substituted activity for knowing. Another parochial influence, marketed under the cry of relevance, is ethnic studies programs--Black, Chicano, and Indian. I once saw a proposal for a Chicano studies program at a Texas University in which almost every subject was proceeded by the qualifier "Chicano." The faculty had the good sense not to approve a program which would have sacrificed long term educational competence to the emotional needs of the moment. And schooling, we have noted, is not concerned with the moment. It is, above all, concerned with the future. And it is theoretical and general knowledge, not action to meet the exigencies of the moment, which has the greatest prospective worth.

There is an increasing tendency of curriculum developers to confuse social reform with the objectives of schooling. I have no quarrel with social reform; the school, with young learners, is not the place to initiate such an effort. The schools belong to the poor and the rich, the low and the high, the conservative as well as the liberal. Consequently, the ideas which are presented to young learners must have general acceptance, and not the view of any particular action group. A curriculum developer has every right, as an individual, to belong to the party of his choice and to participate in social action programs as an individual. A teacher bears a similar right and a similar responsibility in his role as a teacher. This caveat of restraint is not a plea for ethical neutrality, but the schools are not the place to air, under the doctrine of relevancy, every immediate issue. Issue oriented curricula may be more divisive than healing, and stimulate unnecessary animosities. If a curriculum developer or teacher must carry his personal views into his professional role, I admonish him to find a new career. The appropriate career in our society for an active social reformer is a politician. This gives him a platform from which to issue his personal views and to create a following. If elected, he can make his will heard as he votes. But the school curriculum is not a place to politicize the student body much less solve all social ills.

Another defect of the problems approach is that it gives a wholly distorted view of our social processes. Just as a course in social disorganization is a poor introduction to sociology, problems-oriented courses border on a pathological introduction to American culture. All cultures have a deficiency between the idealized norms and the practical norms of daily action. The same is true of the United States. But every politician is not corrupt, every plant a polluter, and all society decadent. Some of our social studies people seem to take inordinate glee in depicting the worst in American society without any effort to emphasize our achievements in politics, government, technology, science, and the arts, to name a few.

I would raise a note of caution against such one-sided appraisals, because the public, no less than the curriculum developer and social studies teachers, has a stake in its perception of the curriculum.

A major defect of the problems approach is that it may contribute to a superficial appreciation of the complexity of solving problems. While the application of role playing helps to give a more realistic simulation to problem solving, it must always be remembered that many problems discussed in school are not problems for the young. Instead, they are most frequently adult selections of problems in which it thinks children and more especially young adults should be interested. In the context of the classroom, without the weight of consequence of having to live with the consequences of their decision, elementary and high school children solve problems with great facility. Such examples have often been pointed out to me as examples of the wisdom of children. Here is a confusion of innocence and irresponsibility with an adult's anticipation of the consequences. The cynicism which many young people express may result, in part, from the contradiction which becomes apparent when they realize that the problems they so blithly solved in school are somewhat more intractable.

Conclusion

The disciplines are the means by which knowledge is generated and organized. Consequently, the disciplines provide a logical framework for the selection and organization of content of schooling. Curriculum development based on the disciplines facilitates content selection, cooperation with scientists in the discipline, is compatible with the way teachers are trained, and meets public expectancies. A reception psychology of learning parallels the structure of knowledge as a guide to measuring the facilitative effects of disciplined learning.

The discipline approach lacks the appeal of non-cognitive approaches to curriculum development. At the present time, there is a definite trend toward such non-cognitive approaches under such general rubrics as relevance and problems. Such approaches are self-defeating because they neglect the establishment of orderly and systematic habits of thought which are prerequisite to success in school achievement. Schools have a limited role in enculturation--the development of literacy and the transmission of the culture embedded in the rudiments of formal knowledge. The school thus serves the dual function of screening for professional training as well as providing minimum cultural transmission for the masses. A social problems approach to social studies curricula is defective in systematic knowledge, confuses the role of political action with schooling, and provides a simplistic approach to the solution of complex problems.

The most universal method of curriculum development is, and ought to continue to be translation of theoretical knowledge based upon the separate disciplines.

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